UNITED STATES DISTRICT COURT
DISTRICT OF MARYLAND

CHAMBERS OF
J. FREDERICK MOTZ
UNITED STATES DISTRICT JUDGE

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March 12, 2004

Memo To Counsel Re: Microsoft Corp. Antitrust Litigation
MDL 1332; Competitor Track

The Document Relates To:
Burst.com, Inc. v. Microsoft Corp.
Civil No. JFM-02-2952

Dear Counsel:

The purpose of this letter is to construe certain of the terms used in the three Burst patents in issue ('995, '705, and '839) following the tutorial and *Markman* hearing held on February 26 and February 27, 2004.[1]

"Time compressed" ('995, '839 and '705 patents)

Construction

"Reduced in temporal quality"

Reasons

This is the meaning the plain language suggests.

Microsoft's proposed construction that includes the notion that the compression be into a "predetermined time period" is unpersuasive for several reasons.

First, to the extent that Microsoft's proposed construction is based upon the proposition that the patents contemplate only circuit-switched communication links, the premise is faulty. The patents do not contemplate only circuit-switched communication networks.

Second, although the term "time compression" was used in the sense proposed by Microsoft in the *Haskell* patent cited as prior art in the prosecution history of the '705 patent, Burst distinguished the

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[1]I have construed only those terms that were focused upon during the tutorial and hearing. If you need to have other terms construed now in order to establish the framework for the next stage of litigation, please let me know what those terms are, and I will construe them.

Haskell patent on the ground that the latter contemplated real time transmission: a ground entirely unrelated to the meaning of "time compression" as *Haskell* used the term. Therefore, although the *Haskell* patent itself constitutes intrinsic evidence, the definition of "time compression" contained in the patent was entirely immaterial to the issuance of the '705 patent. There is thus no reasonable basis for inferring that Burst was adopting that definition as its own. *Compare Kumar v. Ovonic Battery Co., Inc.,* 351 F.3d 1364 (Fed. Cir. 2003).

Third, there is ample extrinsic evidence that the term "time compression" has (and at all relevant times had) multiple definitions, embodying the generic concept of reducing the time of data transmission by the dropping of video frames. I find that in light of this evidence, if one of skill of the art intended to use the term with the more individualized meaning proposed by Microsoft, she or he would have said so expressly (just as *Haskell* did).

Fourth, unlike the *Haskell* invention, the inventions patented by Burst do not require goal-oriented compression into a predetermined time slot in order to be workable.

"A time compressed representation . . . having an associated time period that is shorter than a time period associated with a real time representation of said audio/video source information" ('995 patent)

"A time compressed representation . . . having an associated burst time period that is shorter than a time period associated with a real time representation of the received audio/video source information" ('839 patent)

Construction

"A time compressed representation having a single associated burst time period of definite duration known at the time of compression that is shorter than the real time viewing time of the received audio/video information."

Reasons

The words "an associated" necessarily imply a single "burst time period."[2] If multiple burst time periods were contemplated, the patents would have said "associated burst time periods."

Likewise, the participle "having" which precedes the phrase "an associated burst time period" necessarily implies that the quality of being "shorter than the real time viewing time of the audio/video

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[2]Because the length of any "associated burst time period" would vary with the bandwidth of the communication link being utilized, it appears that by using language positing a single associated burst time period, the '995 and '839 patents contemplate that where more than two VCR-ETs (or other apparatuses) are connected, they all are using the same type of communication link for transmission of a particular time compressed representation.

source information" exists at the time the "time compressed representation" is made. This does not mean, as I have indicated in construing the term "time compressed," that the "associated burst time period" must be a time slot determined prior to the compression. However, because the time period for transmitting data varies with the bandwidth of a communication link and because the "associated burst time period" must be known to be "shorter than the real time viewing time of the audio/video source information" at the time the "time compressed representation" is made, the nature of the link that is to be used in connection with the transmission of a time compressed representation must be known at the time of compression.[3]

"Substantially shorter" ('705 patent)

I am not persuaded by the proposed construction of the term "substantially shorter" proffered by either side. It seems to me that Burst's proposed construction is too broad and that Microsoft's is too narrow. When and if it is necessary for me to construe the term in order to decide summary judgment motions or otherwise move the litigation along, I will request further argument from counsel and perhaps additional extrinsic evidence from experts.

"Audio/video source information" ('995, '839 and '705 patents)

Construction

"Audio/video source information" constitutes the entirety of the data (whether an entire program or a portion of a program) intended to be transmitted, not the individual frames or segments of that data. Thus, the claims do not cover continuous processing and transmission of data.

Reasons

First, the claims in each of the patents plainly describe the processing of "audio/video source information" in four distinct sequences: receiving, compressing, storing, and transmitting. Each must be accomplished before the other begins.

Second, the prosecution history of the '995 patent confirms that this step-by-step sequence is material to what is being claimed. Burst distinguishes the patent from prior art on that ground.

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[3]The parallel language of the '705 patent also supports my construction. That patent, unlike the '995 and '839 patents, speaks not of "a time compressed representation . . . having an associated burst time period that is shorter than a time period associated with a real time representation of said audio/video source information" but of "a digital time compressed representation . . . wherein . . . said audio/video information *is capable of* being transmitted in a burst transmission time period that is substantially shorter than a time period associated with real time viewing by a receiver of said audio/video source information." *(Emphasis added.)* If the time compressed representation needs only to be "capable of" a shorter period of transmission, its duration need not be known at the time of compression.

Moreover, Burst makes it unequivocally clear that each step cannot be accomplished until all of the earlier steps have been completed by inserting the word "then" before each change in sequence.

Third, the '995 patent describes storage in a way that assumes the entire program is compressed and stored as a whole. It states that "if no data compression technique is used, it would take approximately 51.03 gigabytes to store a 2 hour movie, but using the above compression techniques, it is estimated that memory 13 will require only 250 megabytes." '995 patent 5:20-24.

Fourth, the concept of a "time compressed representation," particularly one which (as I have construed it) requires a "single associated burst time period of definite duration known at the time of compression," clearly contemplates a completed program that exists prior to transmission.

Fifth, although the patents do refer to "frames," "strips of frames," and "video segments," they do so only in the context of the function of editing and rearranging data stored in Read Only Memory. '995 patent 6:27, 42-44; 9:49-52. The absence of such references in describing other processing functions implies that those functions involve composite frames and unsegmented data. Moreover, the concept of editing and rearranging frames, strips of frames, and video segments makes sense only if the data being edited and rearranged is part of a larger whole.[4]

"Multiplicity of video frames collectively representing at least one full motion video program" ('705 patent)

Construction

This term means that an entire audio/video file must be processed as a whole, not in parts.

Reasons

In addition to the reasons I just recited in connection with the construction of the term "audio/video source information," the use of the words "at least" makes clear that an entire program,

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[4]Although I am hesitant to make this observation because it was not raised by Microsoft's counsel or by Dr. Von Herzen, Microsoft's expert, it also seems to me that if the Burst patents contemplated "pipelining" on the processing end and "streaming" on the receiving end, they would have included a step for "buffering" - which is required for streaming even where the communication link to be used is known - in the claims or at least the specification language. I am not persuaded by Dr. Stevenson's testimony at the end of the *Markman* hearing that a step for buffering was included by virtue of the fact that the specifications reflected a component of random access memory that could be effectively used for buffering. I have no doubt, as testified to by Dr. Stevenson, that random access memory is a means for buffering. As I understand the means plus function test, however, it surely is not sufficient to mention a structure without linking the structure to a function (just as it is insufficient to describe a function without linking it to a structure). In any event, my construction of "audio/video information" would be the same whether or not this observation is accurate.

not a part of a program, be processed.[5] Burst's proposed construction would permit "at least one . . . video program" to include "less than one video program." Burst's attempt to escape this dilemma by contending that "program" can itself mean something less than a complete program fails because the plain meaning of "program" is to the contrary. This plain meaning is confirmed, rather than contradicted, by other language in the patent: "[as] used in the remainder of this specification, the term 'program' encompasses movies and other types of video and/or audio materials, whether broadcast from a TV station or another source." '705 patent 1:23-26.

"Transceiver" ('995, '839 and '705 patents)

Construction

This term requires that all components be contained in a common housing.

Reasons

First, the IEEE definition of transceiver states that all of the component parts are contained in a common housing. Although the definition says that "usually" the reason for this is portability, the very use of the term "usually" implies that there are other circumstances in which the components are contained in a common housing even though the goal is not portability.

Second, Burst has come forward with no other authoritative definition. The American Heritage Dictionary entry upon which it relies defines "apparatus," not "transceiver."

Third, the word "transceiver" - which is a combination of transmitter and receiver - itself implies that the different components are contained in a single unit.

Fourth, claim 30 of the '995 patent covers "a plurality of audio/video transceivers, coupled via one or more communication links, each of said audio/video transceivers comprising . . . . ." '995 patent 14:58-60. This language at least strongly implies (if it does not expressly state) that each of the connected devices has within itself all necessary component parts.

Fifth, the description of the VCR-ET in the preferred embodiment of a "transceiver" states that all of the component parts are "in a common housing." '995 patent 3:28-37, '839 patent 3:41-50, '705 patent 3:39-47.

Sixth, although in the '705 patent there is an alternative embodiment of the VCR-ET that does not have all of the elements in the same housing, the VCR-ET is not referred to as a "transceiver" in that embodiment. '705 patent 10:51 et seq.

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[5]I am not relying upon the word "full" because it is undisputed that the words "full motion video" refer to a program in which approximately 30 frames per second are processed.

"Compression means" ('995 and '705 patents)

Construction

'995 patent: the AMD 7971 hardware chip; '705 patent: none

Reasons

The means plus function test applies as to both patents. In the specifications to the '995 patent the only means linked to the compression function is the AMD 7971 hardware chip. Two CPUs or microprocessors are also described in the specifications but they are not linked to the compression function. One of the CPUs merely controls the AMD 7971 compression chip; it does not itself perform the compressing function. The other CPU is used only in the editing function.

There is no reference to AMD 7971 (or any other corresponding structure) in the '705 patent.

Both the '995 and the '705 patents refer to compression algorithms. However, an algorithm standing alone is a mere abstraction that itself requires a means for execution. Therefore, I find that unless an algorithm is combined with such an execution means, it does not constitute a structure within the meaning of section 112, ¶ 6.[6]

"Editing"[7] ('995 and '705 patents)

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[6]The patents refer to two algorithms for compressing video information. During the tutorial and *Markman* hearing, Dr. Stevenson, Burst's expert, conceded that one of these algorithms could not have been executed by the microprocessors available in 1988 when the '995 patent application was submitted. Although he testified that the other algorithm referred to in the patent could have been executed by the microprocessors available in 1988, Dr. Von Herzen, Microsoft's expert, disagreed with him on the point. To the extent that it is necessary and appropriate for me to resolve factual disputes at the claims construction stage, I credit Dr. Von Herzen's testimony over the testimony of Dr. Stevenson on this issue. Among other things, it appears that Dr. Stevenson left out an important step - loading the old pixel value - when making his calculations.

I mention these facts because it seems to me that the unavailability of software in 1988 to execute the algorithms referred to in the patents supports the view that algorithms must be combined with the means to implement them before becoming a structure within the meaning of the means plus function test. Otherwise, the very purpose and requirement of the test - to limit the scope of a patent to structures disclosed in the specifications - would be undermined.

[7]In light of my construction of the word "editing" as a function, I have not addressed the question of whether the patent specifications link a described structure to that function. If this issue becomes material at a later stage of these proceedings, I will then address that issue.

Construction

This word does not include the function of creating a playlist.

Reason

The plain meaning of the word "editing" suggests modifying the content of information, not creating an external list that arranges the information. Nothing in the patents suggests that the word was used by Burst in any other manner. To the contrary, in speaking about editing, the specifications describe changing a frame's contrast, brightness, sharpness and color, deleting and inserting information, and the like. '995 patent 6:23-48, '705 patent 6:40-57.

"Video Library" ('995, '839 and '705 patents)

Construction

This term requires that videos stored in a "video library" be in time compressed form.

Reason

The claims language of each of the patents requires that audio/video source information be stored in the library "as time compressed representations." '995 patent 12:66-68, 13:5-9; '839 patent 14:42-44, 49-51; '705 patent 15:15-17.

Despite, the informal nature of this ruling, it shall constitute an Order of Court, and the Clerk is directed to docket it accordingly.

Very truly yours,

/s/

J. Frederick Motz
United States District Judge

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